AKAI

DVD HOME THEATRE SYSTEM

Model:
DV - R4030VSMK

SERVICE MANUAL
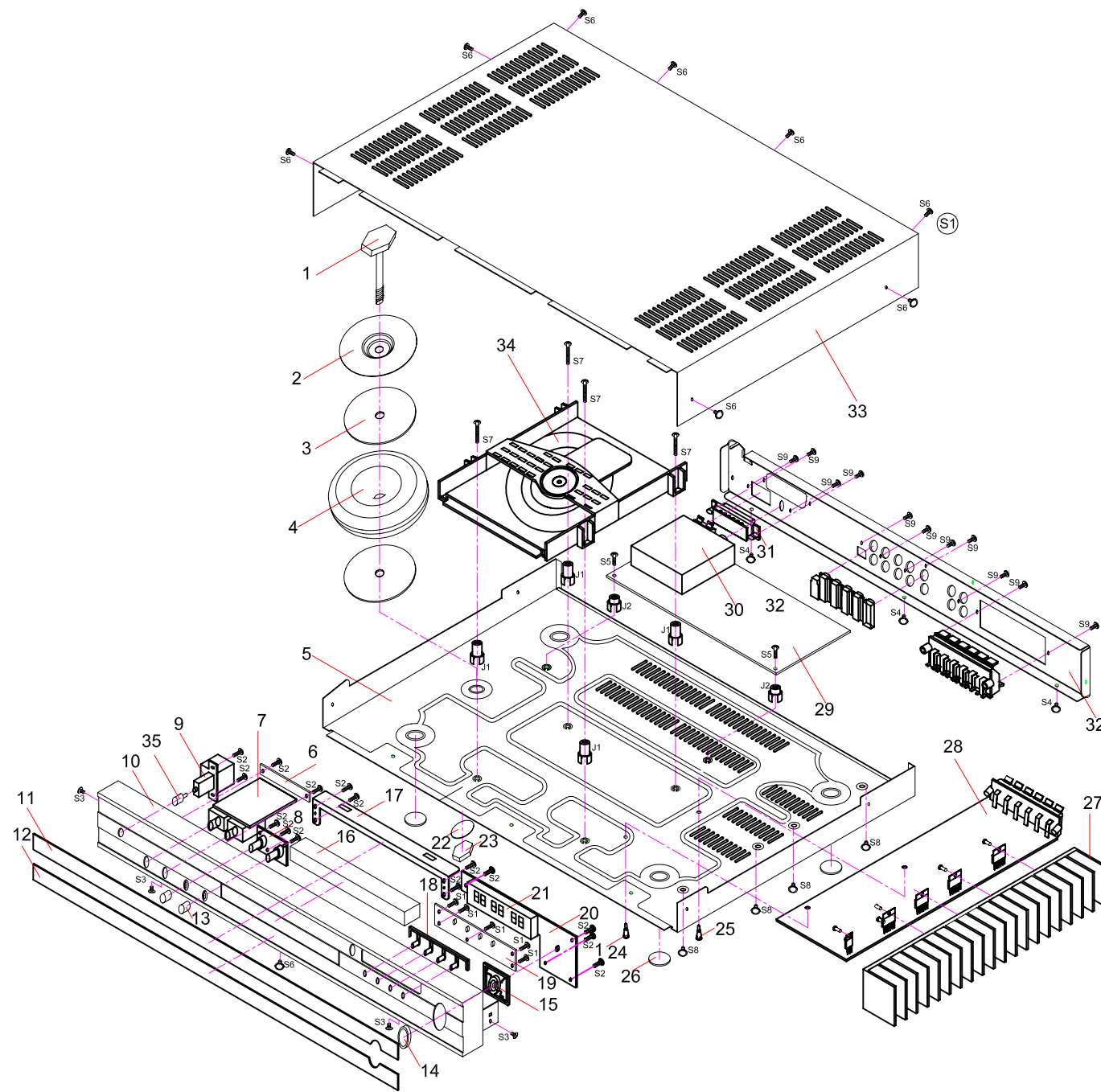
AKAI
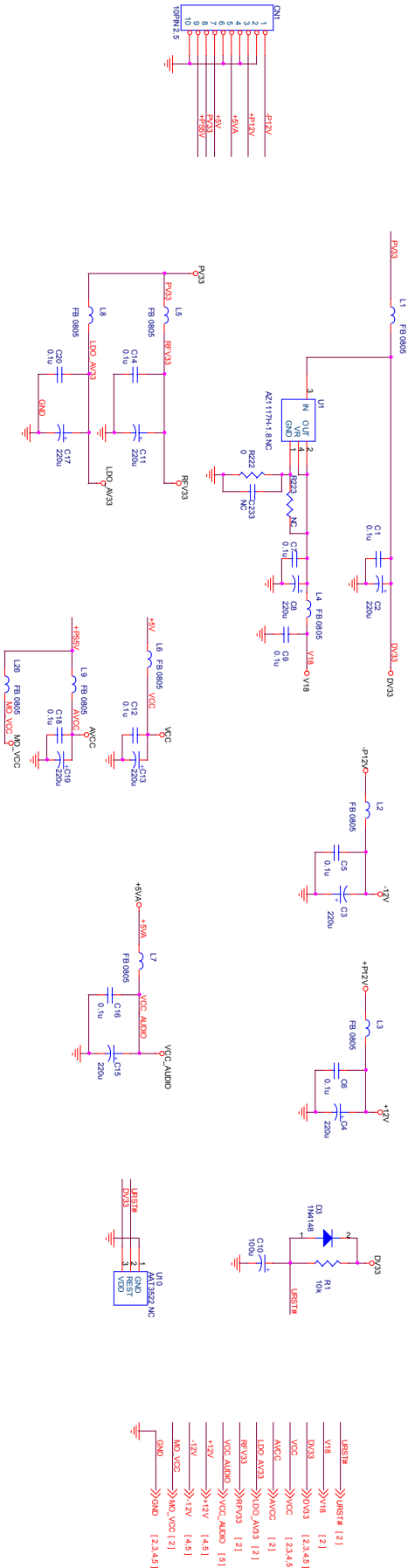
DV-R4030VSMK

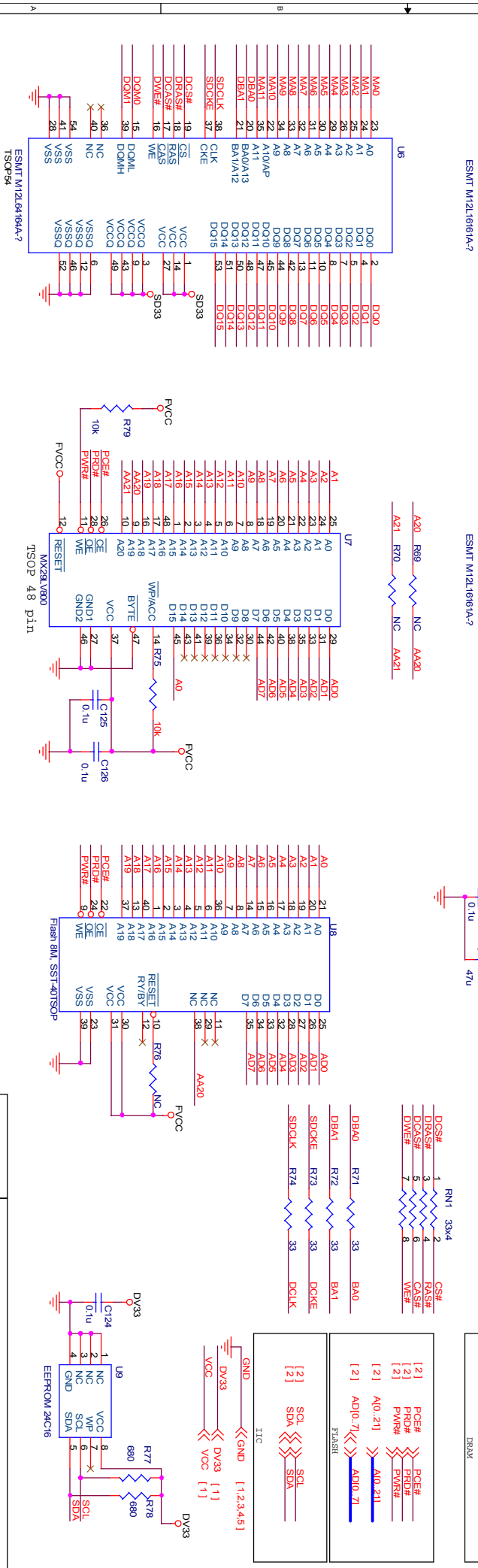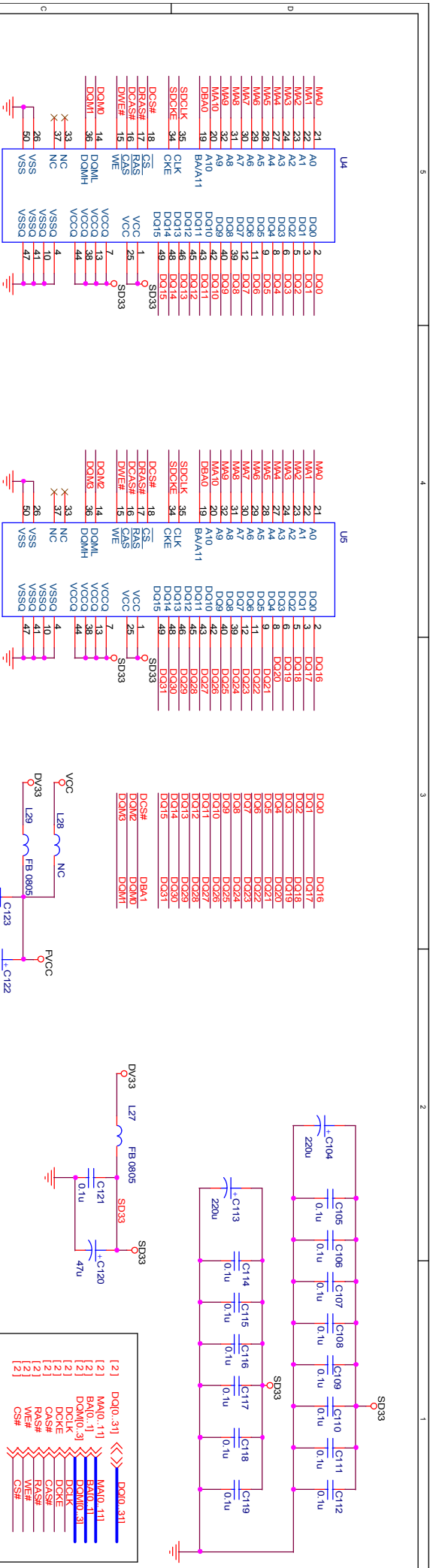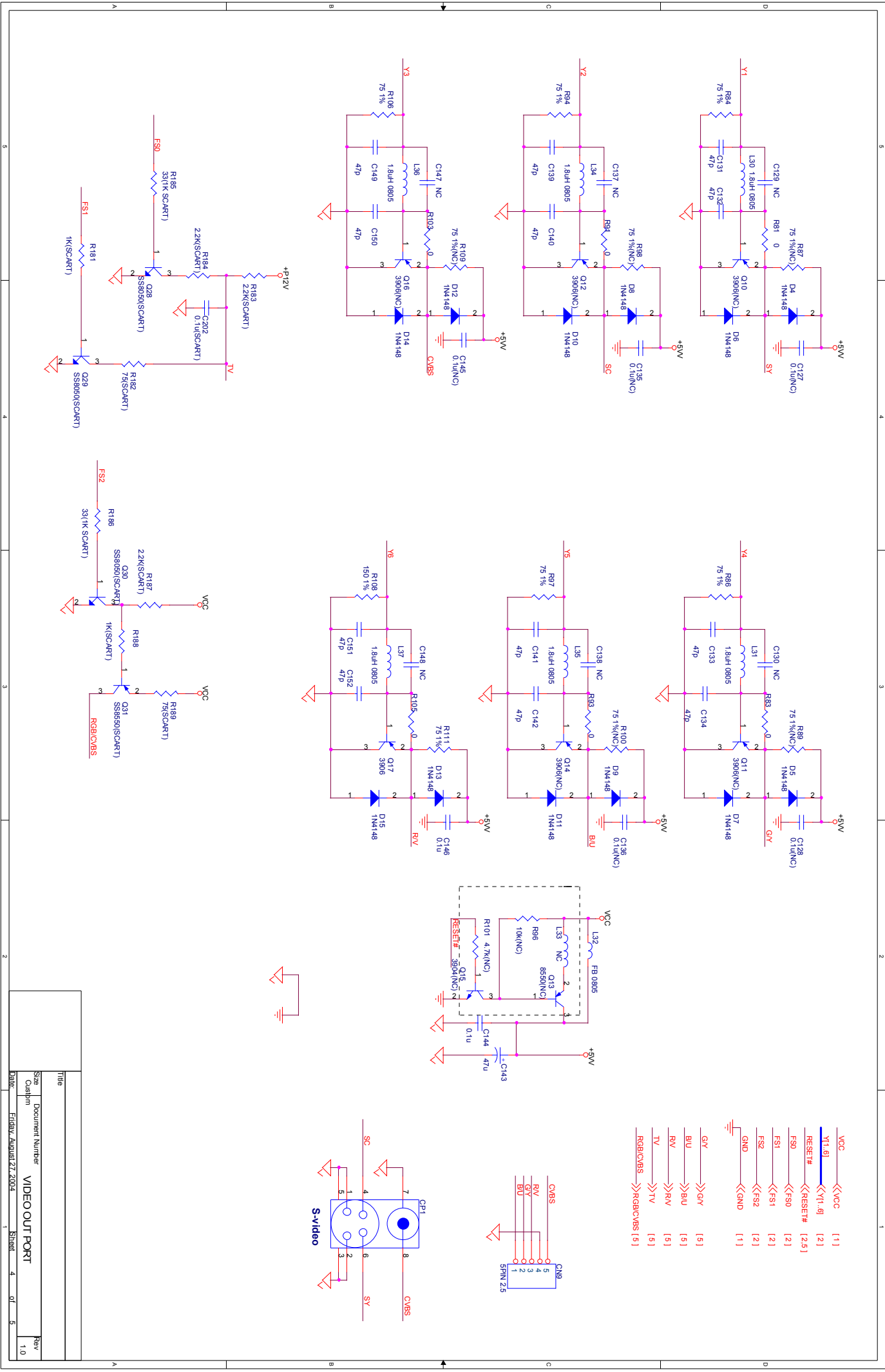| Item	Description	Qty	Item	Description	Qty
30	RECEIVER	1			
29	INPUT ASS'Y	1			
28	SPEAKER OUT PCB	1			
27	RADIATOR	1	S1	M3X6	5
26	FOOT PIECE	1	S2	M3x8	15
25	PLANE UNDERPROP H=10	1	S3	M3X4	4
24	PLANE UNDERPROP H=5	1	S4	M3x4	3
23	CAP NUT	1	S5	M3X10	2
22	WASHER	1	S6	M3X6	9
21	DISPLAY SCREEN	1	S7	M3x14	4
20	DISPLAY PCB	1	S8	M4X10	4
19	KEY PCB	1	S9	M3X8	11
18	FUNCTION KEY	1			
17	PANEL BRACKET	1			
16	TOLL BAR	4	J1	Φ11×7mm	4
15	FUNCTION KEY	1	J2	Φ11×5mm	2
14	decoration	1			
13	MIC KNOB	2			
12	mirror(2)	1			
11	mirror(1)	1			
10	PANEL	1			
9	POWER SWITCH	1			
8	MIC SOCKET	1			
7	MIC PCB	1			
6	MIC BRACKET	1			
5	MOTHERBOARD	1	35	POWER KEY	1
4	TRANSFORMER	1	34	Mechanism Ass'y	1
3	RUBBER WASHER	2	33	COVER	1
2	COVER	1	32	BACKBOARD	1
1	BOLT	1	31	SCART	1

MT1389C DVD Board for SONY KHM310 PUH

1 INDEX & POWER, RESET
2 RF / SERVO - MT1336E
3 MPEG - MT1379E
4 MEMORY - SDRAM, FLASH/EEPROM
5 AUDIO - WM8746, VIDEO FILTER

NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
DV33	Digital 3.3V	MT1389E
RFV33	Servo 3.3V	MT1336E
LDO_AV33	Laser Diode 3.3V	MT1389E
AVCC	RF 5V	PICKUP HEADER
V18	Digital 1.8V	MT1389E
SD33	Digital 3.3V	SDRAM
+12V	Audio +12V	OP AMP.
-12V	Audio -12V	OP AMP.
AVDD	Audio 5V	Audio DAC
DVDD	Audio 5V	Audio DAC

CN1
10PIN 2.5
1 -P12V
2 +P55V
3 PV33
4 +5V
5 +5VA
6 +P12V
7
8
9
10

U1
AZ1117H-1.8
IN OUT
VR
GND NC

R222 0
C233 NC

L1 FB 0805
C1 0.1u
C2 220u
DV33 DV33

C8 220u
L4 FB 0805
C9 0.1u
V18 V18

PV33
FB 0805 L8
LDO_AV33
C20 0.1u
GND
C17 220u
LDO_AV33

PV33
FB 0805 L5
RFV33
C14 0.1u
C11 220u
RFV33

+5V
FB 0805 L6
VCC
C12 0.1u
C13 220u
VCC

+P55V
FB 0805 L26
MO_VCC
C18 0.1u
C19 220u
MO_VCC

L9 FB 0805
AVCC
AVCC

-P12V
FB 0805 L2
-12V
C5 0.1u
C3 220u

+P12V
FB 0805 L3
+12V
C6 0.1u
C4 220u

+5VA
FB 0805 L7
VCC_AUDIO
C16 0.1u
C15 220u
VCC_AUDIO

D1 1N4148
C10 100u
R1 10K
URST#
DV33

U10
AAT3522 NC
GND
REST
VDD
URST#
DV33

URST# [2]
V18 [2]
DV33 [2,3,4,5]
AVCC [2,3,4,5]
VCC [2,3,4,5]
RFV33 [2]
LDO_AV33 [2]
VCC_AUDIO [5]
+12V [4,5]
-12V [4,5]
MO_VCC [2,3,4,5]
GND [2,3,4,5]

MT1389
Pin assignment version 1.5

U2

MT1389/C NOTE:
C41,C36,C43,C44,C37 NC;
R24 560

U4
ESMT M12L16161A-?
U5
ESMT M12L16161A-?
U6
ESMT M12L64164A-?
TSOP54
U7
MX29LV800
TSOP 48 pin
U8
Flash 8M, SST-40TSOP
U9
EEPROM 24C16
SD33
DV33
VCC
FVCC
GND
C104 220u
C105 0.1u
C106 0.1u
C107 0.1u
C108 0.1u
C109 0.1u
C110 0.1u
C111 0.1u
C112 0.1u
C113 220u
C114 0.1u
C115 0.1u
C116 0.1u
C117 0.1u
C118 0.1u
C119 0.1u
L27 FB 0805
C121 0.1u
C120 47u
L28 NC
L29 FB 0805
C123 0.1u
C122 47u
RN1 33x4
R69 NC
R70 NC
R71 33
R72 33
R73 33
R74 33
R75 10k
R76 NC
R79 10k
R77 680
R78 680
C124 0.1u
C125 0.1u
C126 0.1u
DRAM
FLASH
IIC
[2] DQ[0..31]
[2] MA[0..11]
[2] BA[0..1]
[2] DQM[0..3]
[2] DCLK
[2] DCKE
[2] CAS#
[2] RAS#
[2] WE#
[2] CS#
[2] PCE#
[2] PRD#
[2] PWR#
[2] A[0..21]
[2] AD[0..7]
[2] SCL
[2] SDA
GND [1,2,3,4,5]
DV33 [1]
VCC [1]

Title

Size B | Document Number | Rev
SDRAM&FLASH | 1.0

Date: Friday, August 27, 2004 | Sheet 3 of 5

VIDEO OUT PORT

Title: VIDEO OUT PORT
Size: Custom
Document Number
Date: Friday, August 27, 2004
Sheet 4 of 5
Rev 1.0

S-video

5PIN 2.5

CVBS
R/V
G/Y
B/U

SC
SY
CVBS

CP1

CN9

VCC
RESET#
Y(1..6)
GND
FS2
FS1
FS0
G/Y
B/U
R/V
TV
RGB/CVBS
RGB/CVBS

[1] VCC
[2,5] RESET#
[2] Y(1..6)
[1] GND
[2] FS2
[2] FS1
[2] FS0
[5] G/Y
[5] B/U
[5] R/V
[5] TV
[5] RGB/CVBS

HARDWARE:IIS 24BIT

U12 WM8766

NJM4558 OPA — U11A, U11B, U13A, U13B, U14A, U14B

RMAIN, LMAIN, RREAR, L-REAR, LFE, CENT

CN11 7PIN 2.5
CN10 7PIN 2.5
CN12 7PIN 2.5
CP3, CP4 AV3X2
CP2 TOTX178
CN13 3PIN 2.5

H1 CIRDIN_9-R, H2 CIRDIN_9-R